

Southwest Fisheries Science Center
8604 L Jolla Shores Drive
La Jolla, CA 92038

September 14, 2004
F/SWSC1:JLB

CRUISE ANNOUNCEMENT

VESSEL: Research Vessel David Starr Jordan

CRUISE DATES: August 2 - 11, 2004

PROJECT: Southwest Fisheries Science Center
Fisheries Resources Division
Deep Water Abalone Survey

ITINERARY: Depart San Diego, CA 0730 August 2, 2004 from MarFac and move to Navy fuel pier before proceeding to San Clemente Island to conduct ROV surveys of deep water abalone habitat. On August 11 return to San Diego.

OBJECTIVES: Survey deep water abalone on rocky habitat around San Clemente Island.

SPECIAL CIRCUMSTANCES: San Clemente Island and surrounding waters are a U. S. Naval training area subject to restricted access by time and location. Schedules of activities are available at www.scisland.org. Survey activities will be coordinated with island personnel.

Multi-beam surveys will be conducted during daylight hours by a small boat operated by California State University, Monterey Bay. Four CSUMB personnel will berth and eat on board the Jordan at night

PROCEDURES: At each dive site the ship will deploy the ROV and the scientific party will survey deep water abalone 30 to 60m with a ROV. Transect lines will be stratified into three depth strata, 30-40, 40-50, and 50-60. Transects will be 1 km in length and will run along isobaths within the depth strata. This will require close coordination between ship and ROV pilot.

Because the surveys are targeting areas with rocky substrate and reefs, extreme caution will be used when operating the ROV. Given potential inclement weather situations, the ROV will be deployed only in areas where it is deemed safe to operate, (i.e. in current of 2.5 kts or less and visibility above 2 nm).

ROV OPERATIONS WILL BE CONDUCTED ON THE PORT SIDE. THE WIND SHOULD BE ON THE PORT SIDE DURING ALL LAUNCHING AND RECOVERY OPERATIONS.

The ROV will be tracked using a directional hydrophone mounted on the STARBOARD side of the ship. The hydrophone will be deployed prior to launching the ROV. A down weight will be lowered just below the water surface from the PORT CTD winch. The ROV will be launched using the articulating crane. The ROV will be maneuvered away from the ship and the umbilical

will be attached to the wire. The down weight and ROV will be lowered simultaneously. Recovery of the ROV will reverse the launching procedure. **THE WIND SHOULD BE ON THE PORT SIDE DURING RECOVERY OPERATIONS.** The ship and ROV will operate together to make transects from deep (about 60m) to shallow (about 30m). A remote monitor on the bridge will display the ship and ROV positions to facilitate coordination.

Multi-beam mapping will be conducted during daylight hours from a small boat by Rikk Kvitek and CSUMB personnel. The CSUMB boat will rendezvous with the Jordan each evening and provide multi-beam maps of each day's survey. CSUMB personnel will berth on the vessel and depart each morning before the Jordan departs Wilson Cove or anchorage in time to arrive on the days first station at 6 AM. Stations have been pre-selected (See below) but may be modified due to US Navy activities.

EQUIPMENT: Phantom S2 ROV
ORE Trackpoint system
Color TV monitors
Under water Lasers
Portable digital video recorder
Tethers
Tether reel

Special Equipment:
Pole and mount for directional hydrophone
Brace welded at water line to support hydrophone pole